# UV LED Bar

**ORDERCODE 42203**

SHOWELECTRONICS FOR PROFESSIONALS

**Congratulations!**
You have bought a great, innovative product from Showtec.
The Showtec LED Light Bar UV brings excitement to any venue. Whether you want simple plug-&-play action or a sophisticated DMX show, this product provides the effect you need.

You can rely on Showtec, for more excellent lighting products.
We design and manufacture professional light equipment for the entertainment industry.
New products are being launched regularly. We work hard to keep you, our customer, satisfied.
For more information: iwant@showtec.info

You can get some of the best quality, best priced products on the market from Showtec.
So next time, turn to Showtec for more great lighting equipment.
Always get the best -- with Showtec !

Thank you!

## Showtec LED Light Bar UV™ Product Guide

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# WARNING

**CAUTION!**
**Keep this device away from rain and moisture!**

**FOR YOUR OWN SAFETY, PLEASE READ THIS USER MANUAL CAREFULLY BEFORE YOUR INITIAL START-UP!**

## SAFETY INSTRUCTIONS

Every person involved with the installation, operation and maintenance of this device has to:

- be qualified
- follow the instructions of this manual

**CAUTION! Be careful with your operations.**
**With a dangerous voltage you can suffer**
**a dangerous electric shock when touching the wires!**

Before your initial start-up, please make sure that there is no damage caused by transportation. Should there be any, consult your dealer and do not use the device.

To maintain perfect condition and to ensure a safe operation, it is absolutely necessary for the user to follow the safety instructions and warning notes written in this manual.

Please consider that damages caused by manual modifications to the device are not subject to warranty.

This device contains no user-serviceable parts. Refer servicing to qualified technicians only.

***IMPORTANT:***

*The manufacturer will not accept liability for any resulting damages caused by the non-observance of this manual or any unauthorized modification to the device.*

- Never let the power-cord come into contact with other cables! Handle the power-cord and all connections with the mains with particular caution!
- Never remove warning or informative labels from the unit.
- Never use anything to cover the ground contact.
- Never leave any cables lying around.
- Never look directly into the light source.
- Never cover the air vents, otherwise the device will get to hot.
- Never use the device during thunderstorms, unplug the device immediately.
- Never leave various parts of the packaging (plastic bags, polystyrene foam, nails, etc.) within children's reach, as they are potential sources of danger.
- Do not insert objects into air vents.
- Do not open the device and do not modify the device.
- Do not connect this device to a dimmerpack.
- Do not shake the device. Avoid brute force when installing or operating the device.
- Do not switch the device on and off in short intervals, as this would reduce the system's life.
- Only use device indoor, avoid contact with water or other liquids.
- Only operate the device after having familiarized with its functions.
- Avoid flames and do not put close to flammable liquids or gases.
- Always allow free air space of at least 50 cm around the unit for ventilation.
- Always disconnect power from the mains, when device is not used or before cleaning! Only handle the power-cord by the plug. Never pull out the plug by tugging the power-cord.
- Make sure that the device is not exposed to extreme heat, moisture or dust.
- Make sure that the available voltage is not higher than stated on the rear panel.
- Make sure that the power-cord is never crimped or damaged. Check the device and the power-cord from time to time.
- Make sure that no side forces can impact on the truss system.

- The cable insert or the female part in the device must never be strained. There must always be sufficient cable to the device. Otherwise, the cable may be damaged which may lead to deadly electrical shocks.
- If the external cable is damaged, it has to be replaced by a qualified technician.
- If device is dropped or struck, disconnect mains power supply immediately. Have a qualified engineer inspect for safety before operating.
- If the device has been exposed to drastic temperature fluctuation (e.g. after transportation), do not switch it on immediately. The arising condensation water might damage your device. Leave the device switched off until it has reached room temperature.
- If your Showtec device fails to work properly, discontinue use immediately. Pack the unit securely (preferably in the original packing material), and return it to your Showtec dealer for service.
- For adult use only. The device must be installed out of the reach of children. Never leave the unit running unattended.
- For replacement use fuses of same type and rating only.
- The user is responsible for correct positioning and operating of the LED Light Bar. The manufacturer will not accept liability for damages caused by the misuse or incorrect installation of this device.
- This device falls under protection class I. Therefore it is essential to connect the yellow/green conductor to earth.
- Repairs, servicing and electric connection must be carried out by a qualified technician.
- WARRANTY: Till one year after date of purchase.

## OPERATING DETERMINATIONS

If this device is operated in any other way, than the one described in this manual, the product may suffer damages and the warranty becomes void.
Any other operation may lead to dangers like short-circuit, burns, electric shock, lamp explosion, crash etc.

You endanger your own safety and the safety of others!

### Rigging

*Please follow the European and national guidelines concerning rigging, trussing and all other safety issues.*

*Do not attempt the installation yourself !*
*Always let the installation be carried out by an authorized dealer !*

### Procedure:

- If the LED Light Bar UV is lowered from the ceiling or high joists, professional trussing systems have to be used.
- Use a clamp to mount the LED Light Bar UV, with the mounting-bracket, to the trussing system.
- The LED Light Bar UV must never be fixed swinging freely in the room.
- The installation must always be secured with a safety attachment, e.g. an appropriate safety net or safety-cable.
- When rigging, derigging or servicing the LED Light Bar UV, always make sure, that the area below the installation place is blocked and staying in the area is forbidden.

### Connection with the mains

Connect the device to the mains with the power-plug.
Always pay attention, that the right color cable is connected to the right place.

| International | EU Cable | UK Cable | US Cable | Pin |
|---|---|---|---|---|
| L | BROWN | RED | YELLOW/COPPER | FASE |
| N | BLUE | BLACK | SILVER | NUL |
| ⏚ | YELLOW/GREEN | GREEN | GREEN | EARTH |

Make sure that the device is always connected properly to the earth!

*Improper installation can cause serious damage to people and property !*

## ⚠ Return Procedure ⚠

Returned merchandise must be sent prepaid and in the original packing, call tags will not be issued. Package must be clearly labeled with a Return Authorization Number (RMA number). Products returned without an RMA number will be refused. Highlite will not accept the returned goods or any responsibility. Call Highlite 0031-455667723 or mail aftersales@highlite.nl and request an RMA prior to shipping the fixture. Be prepared to provide the model number, serial number and a brief description of the cause for the return. Be sure to properly pack fixture, any shipping damage resulting from inadequate packaging is the customer's responsibility. Highlite reserves the right to use its own discretion to repair or replace product(s). As a suggestion, proper UPS packing or double-boxing is always a safe method to use.

**Note: If you are given an RMA number, please include the following information on a piece of paper inside the box:**

1) Your name
2) Your address
3) Your phone number
4) A brief description of the symptoms

## Claims

The client has the obligation to check the delivered goods immediately upon delivery for any short-comings and/or visible defects, or perform this check after our announcement that the goods are at their disposal. Damage incurred in shipping is the responsibility of the shipper; therefore the damage must be reported to the carrier upon receipt of merchandise.

It is the customer's responsibility to notify and submit claims with the shipper in the event that a fixture is damaged due to shipping. Transportation damage has to be reported to us within one day after receipt of the delivery.

Any return shipment has to be made post-paid at all times. Return shipments must be accompanied with a letter defining the reason for return shipment. Non-prepaid return shipments will be refused, unless otherwise agreed in writing.

Complaints against us must be made known in writing or by fax within 10 working days after receipt of the invoice. After this period complaints will not be handled anymore.

Complaints will only then be considered if the client has so far complied with all parts of the agreement, regardless of the agreement of which the obligation is resulting.

# Description of the device

## Features

The LED Light Bar UV is a LED system from Showtec.

- Power consumption: 50W (full output)
- LEDS: 252 RGB high intensity 10mm LEDs
- Beam angle: 40 °
- 3 pin female XLR socket and 3 pin male XLR socket
- 3 pin XLR Power in and power out
- Linkable via 3-pin XLR cable
- Built-in microphone
- Black aluminium material
- LED Digital display
- Selectable built-in programs mode, Auto running mode, DMX mode, slave mode, sound-activated mode.
- DMX controlled
- Selectable 3, 9 and 3 (P3CH:Built-in programs) DMX channel operation

NOTE: Knowledge of DMX is required to fully utilize this unit.

# Overview

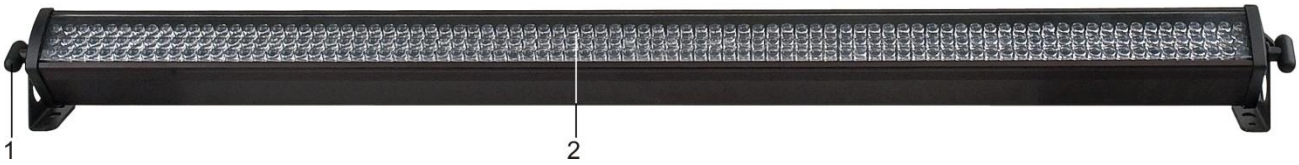



**Fig. 1**

**1)** Adjustment Screw + Mountingbracket for Truss mounting
**2)** Total LED Light Bar UV 252 LEDS

# Backside

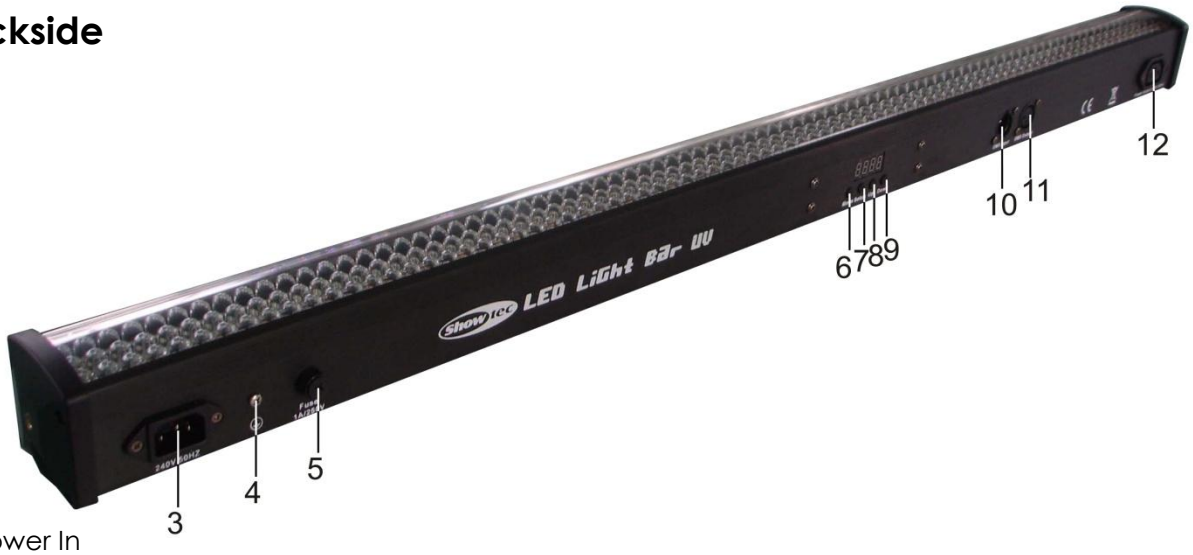



**Fig. 2**

**3)** Power In
**4)** Ground
**5)** Fuse 250V / 1A
**6)** Mode button
**7)** Setup button
**8)** Up button
**9)** Down button
**10)** DMX signal connector (IN) 3-pin
**11)** DMX signal connector (OUT) 3-pin
**12)** Power Out

## Installation

Remove all packing materials from the LED Light Bar UV. Check that all foam and plastic padding is removed. Connect all cables.

**Do not supply power before the whole system is set up and connected properly.**
**Always disconnect from electric mains power supply before cleaning or servicing.**
**Damages caused by non-observance are not subject to warranty.**

## Set Up and Operation

Before plugging the unit in, always make sure that the power supply matches the product specification voltage. Do not attempt to operate a 120V specification product on 230V power, or vice versa.

### One LED Light Bar UV

**1.** Fasten the effect light onto firm trussing. Leave at least 1 meter on all sides for air circulation.
**2.** Plug the end of the electric mains power cord into a proper electric power supply socket.

### Multiple LED Light Bars UV

**1.** Fasten the effect light onto firm trussing. Leave at least 1 meter on all sides for air circulation.
**2.** Use a 3-p XLR cable to connect the LED Light Bar UV and other devices.
The pins:

1. Earth
2. Signal -
3. Signal +

**3.** Link the units as shown In (figure 3), Connect a DMX signal cable from the first unit's DMX "out" socket to the second unit's "in" socket. Repeat this process to link the second, third, and fourth units.
**4.** Supply electric power: Do not supply power before the whole system is set up and connected properly.

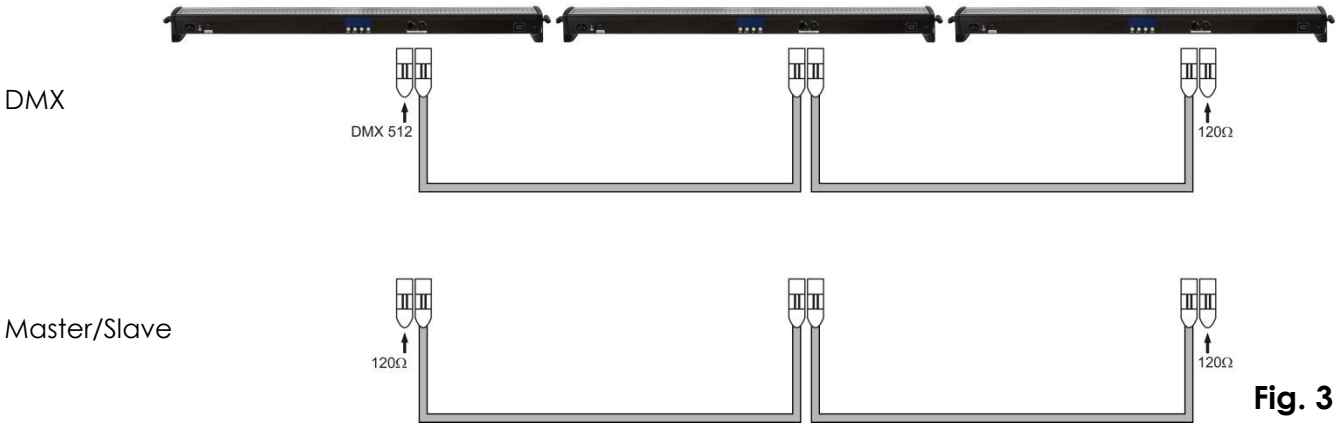



**Fig. 3**

# DMX Protocol

## Control Panel

When the indicator light is on, means the LED Bar is working

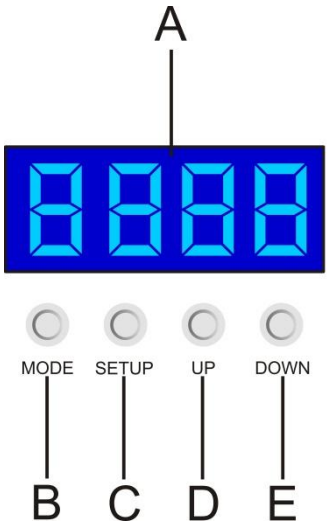



**Fig. 4**

**A.** LED Display
**B.** MODE Button
**C.** SETUP Button
**D.** Up Button
**E.** Down Button

## Control Mode

The fixtures are individually addressed on a data-link and connected to the controller.
The fixtures respond to the DMX signal from the controller.

### DMX Addressing

The control panel on the front side of the base allows you to assign the DMX fixture address, which is the first channel from which the LED Bar will respond to the controller.
Please note when you use the controller, the unit has max. **9** channels.
When using multiple LED Bars, make sure you set the DMX addresses right.
Therefore, the DMX address of the first LED Bar should be **1(A001)**; the DMX address of the second LED Bar should be **1+9=10 (A010**); the DMX address of the third LED Bar should be **10+9=19 (A019)**, etc.
Please, be sure that you don't have any overlapping channels in order to control each LED Bar correctly.
If two or more LED Bars are addressed similarly, they will work similarly.
For address settings, please refer to the instructions under "Addressing' (menu d001)

**Controlling:**
After having addressed all LED Bars, you may now start operating these via your lighting controller.
**Note:** After switching on, the LED Bar will automatically detect whether DMX 512 data is received or not.
If there is no data received at the DMX-input, the "**LED** " on the control panel will not flash.
The problem may be:
- The XLR cable from the controller is not connected with the input of the LED Bar.
- The controller is switched off or defective, the cable or connector is detective, or the signal wires are swapped in the input connector.

**Note:** It's necessary to insert a XLR termination plug (with 120 Ohm) in the last fixture in order to ensure proper transmission on the DMX data link.

## Function Modes

DMX address

Built/in Programs

Auto Mode

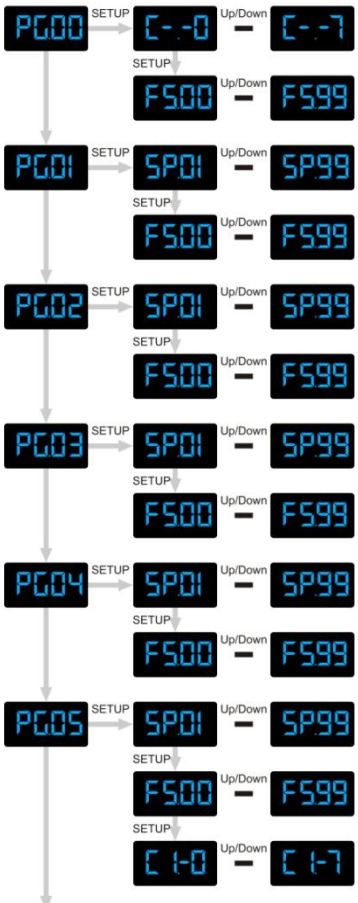
Sound Mode

Slave Mode

## Function Modes

### Built-in Programs Mode

You can select 13 different Programs when using the LED Light Bar UV.




**1)** Press SETUP and then press the UP / DOWN buttons to select the programs (from PG00 to PG12) and select the desired program value.

**2)** When the display shows: PG- -(except PG00), press the SETUP button once, the display will show: SP99

You can set running speed from 01-99, by using the UP/DOWN buttons.

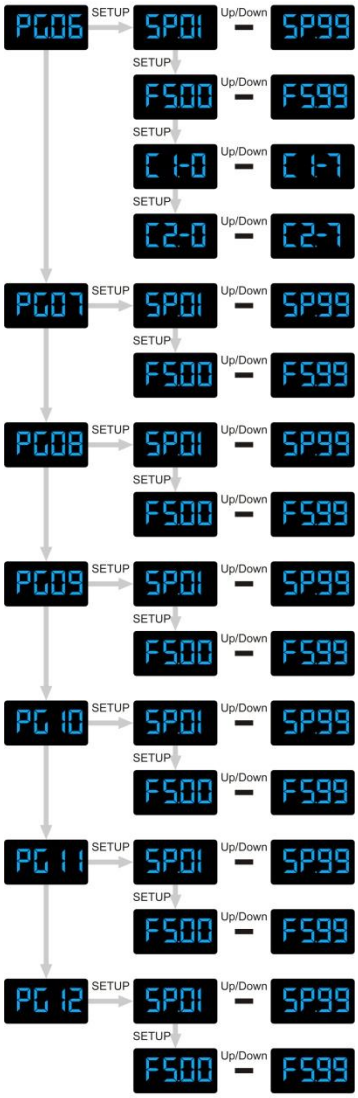
**3)** Press SETUP twice and the display will show F500 . You can set the flash frequency by using the UP/DOWN buttons.

**4)** When the display shows PG00, press SETUP three times and the display will show: C--1 .

Now you can select the static colors by using the UP / DOWN buttons.

**5)** When the display shows PG05, press SETUP three times and the display will show C--1 .

Now you can select the jump color by using the UP / DOWN buttons.




**6)** When the display shows PG06, press SETUP for the third time and the display will show C1-1 .

Now you can select the background color.

**7)** When you press SETUP four times, the display will show C2-1 .

Now you can select the jump color by using the UP / DOWN buttons.

**Example**

When the display shows PG01 , press the SETUP button once and the display will show SP99 .

Now you can set the running speed for this program.
Press SETUP button for the second time, the display will show F500 , you can set the flash frequency.

**Note**: SP (Speed)from 01-99 and FS (Flash Frequency) from 00-99

## Auto Run Mode

Press the MODE button until the display shows: AUTO .
Now the device will play its built-in programs automatically.

## DMX Operation

The LED Light Bar UV's built-in controller will automatically detect the presence of a DMX signal.
In order to receive a DMX signal, the built-in controller must be attached to a DMX controller by a 3-pin DMX cable and the DMX controller must be turned on.
Press the MODE button until the display shows Addr .

Press the SETUP button until the display shows: d001 .
The device now has DMX address 001.
You can change the value from d001 - d512 by using the UP / DOWN buttons.

When you press the SETUP button again , you can choose 3 different DMX Modes:

03Ch 3 Channels

09Ch 9 Channels

P3Ch 3 Channels (Built-in Programs)

You can switch between modes by using the UP / DOWN buttons.

## Master / slave addressing

**Master**

**1)** The default setting for this device is master.
**2)** Only one fixture can be the master.
**Note**: Disconnect the fixture from the DMX controller before master/slave operating, otherwise data collisions may occur and the fixtures will not work properly!
In master/slave mode, the master fixture can execute the built-in programs, all the slave fixtures will work the same.
When operating the master/slave chain, you can identify the master fixture from the slave fixtures easily. The master doesn't have any cable plugged into the DMX input connector.

**Slave control**

This function allows you to control the slaves from the master's control panel in a master/slave operation.
**1)** Only 1 fixture can be the master, the others have to be Slaves. The Default setting for a device is Master. So on the first device you don't have to change anything.
On the slave devices you must press the MODE button until the display shows SLA- .
**2)** All slave devices must have address d001 .

## Sound-controlled Mode

Press the MODE button until the display shows: S031 .
You can change the sensitivity from S000 - S031 by using the UP / DOWN buttons.

# Channel settings

You can choose 3 different DMX Modes:

03Ch 3 Channels

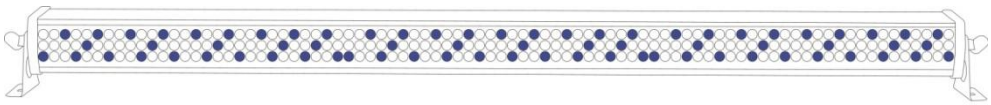
09Ch 9 Channels

P3Ch 3 Channels (Built-in Programs)

## 3 DMX Channels ( 03Ch )

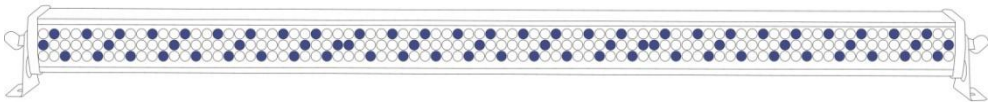
**Channel 1**

| | |
|---|---|
| 0-255 | Gradual adjustment 84x UV LEDs from 0 – 100% |



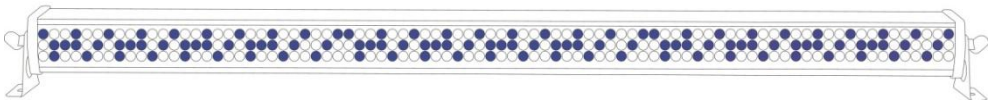
**Channel 2**

| | |
|---|---|
| 0-255 | Gradual adjustment 84x UV LEDs from 0 – 100% |



**Channel 3**

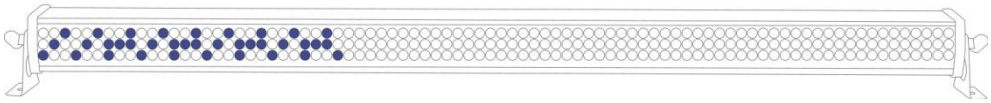
| | |
|---|---|
| 0-255 | Gradual adjustment 84x UV LEDs from 0 – 100% |



## 9 DMX Channels ( 09Ch )

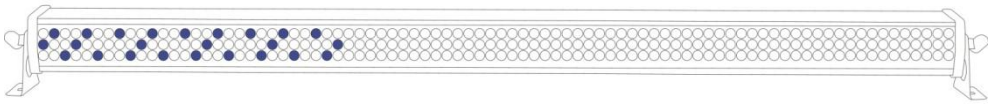
**Channel 1 – UV Section 1**

| | |
|---|---|
| 0-255 | Gradual adjustment 48x UV LEDs from 0 – 100% |



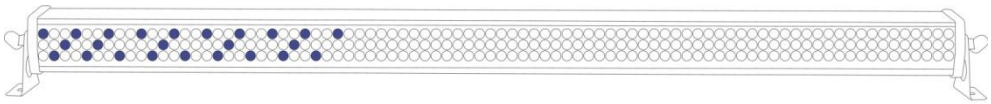
**Channel 2 – UV Section 1**

| | |
|---|---|
| 0-255 | Gradual adjustment 24x UV LEDs from 0 – 100% |



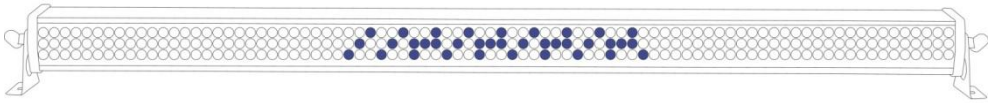
**Channel 3 – UV Section 1**

| | |
|---|---|
| 0-255 | Gradual adjustment 24x UV LEDs from 0 – 100% |



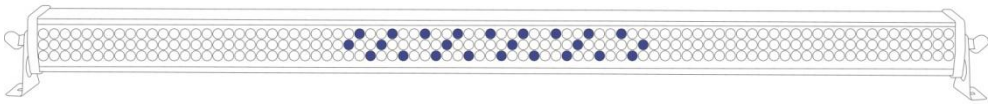
**Channel 4 – UV Section 2**

| | |
|---|---|
| 0-255 | Gradual adjustment 48x UV LEDs from 0 – 100% |



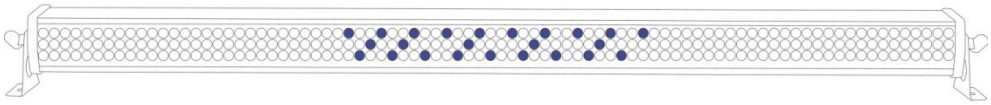
**Channel 5 – UV Section 2**

| | |
|---|---|
| 0-255 | Gradual adjustment 24x UV LEDs from 0 – 100% |



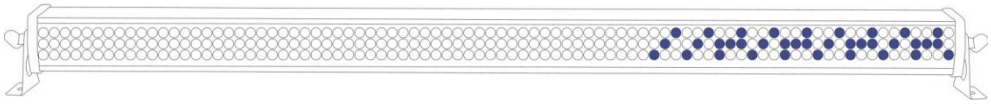
**Channel 6 – UV Section 2**

| | |
|---|---|
| 0-255 | Gradual adjustment 24x UV LEDs from 0 – 100% |



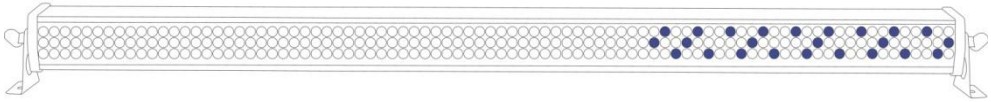
**Channel 7 – Red Section 3**

| | |
|---|---|
| 0-255 | Gradual adjustment 48x UV LEDs from 0 – 100% |



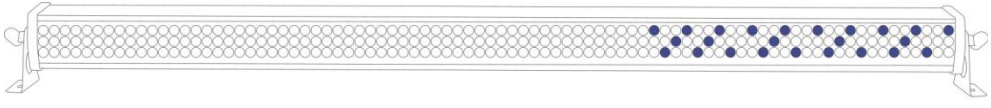
**Channel 8 – UV Section 3**

| | |
|---|---|
| 0-255 | Gradual adjustment 24x UV LEDs from 0 – 100% |



**Channel 9 – UV Section 3**

| | |
|---|---|
| 0-255 | Gradual adjustment 24x UV LEDs from 0 – 100% |



## 3 DMX Channels (Built-in Programs)

**Channel 1 – Built-in Program / Sound-controlled**

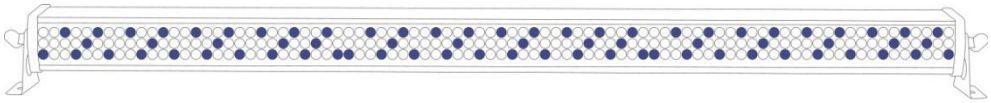
| | |
|---|---|
| 0-17 | Program 00 |
| 18-35 | Program 01 |
| 36-53 | Program 02 |
| 54-71 | Program 03 |
| 72-89 | Program 04 |
| 90-107 | Program 05 |
| 108-125 | Program 06 |
| 126-143 | Program 07 |
| 144-161 | Program 08 |
| 162-179 | Program 09 |
| 180-197 | Program 10 |
| 198-215 | Program 11 |
| 216-233 | Program 12 |
| 234-255 | Sound controlled |

**Channel 2 – Color (Channel 1 must be set 0-17)**

| | |
|---|---|
| 0-36 | No Function |

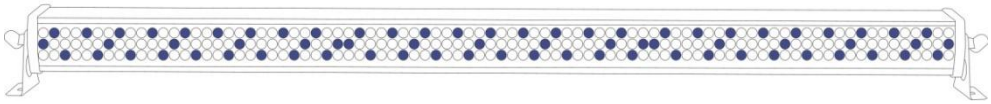
**Channel 2 – Color (Channel 1 must be set 0-17)**

| | |
|---|---|
| 37-72 | Gradual adjustment 84x UV LEDs from 0 – 100% |



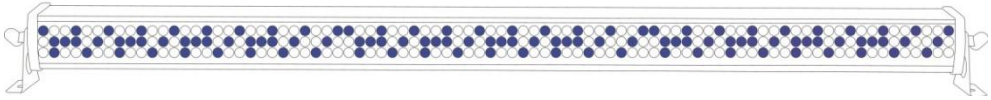
**Channel 2 – Color (Channel 1 must be set 0-17)**

| | |
|---|---|
| 73-109 | Gradual adjustment 84x UV LEDs from 0 – 100% |



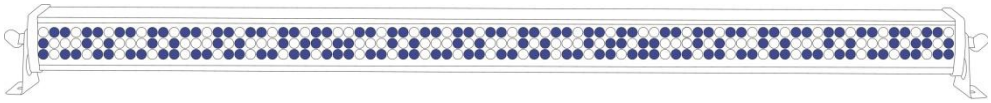
**Channel 2 – Color (Channel 1 must be set 0-17)**

| | |
|---|---|
| 110-145 | Gradual adjustment 84x UV LEDs from 0 – 100% |



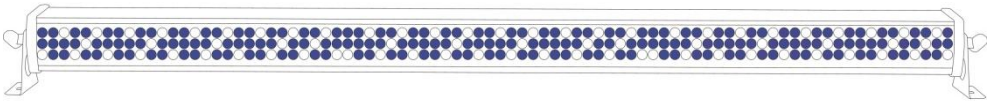
**Channel 2 – Color (Channel 1 must be set 0-17)**

| | |
|---|---|
| 146-182 | Gradual adjustment 84x UV LEDs from 0 – 100% |



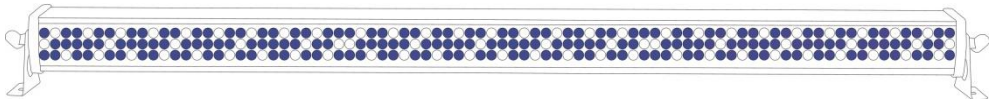
**Channel 2 – Color (Channel 1 must be set 0-17)**

| | |
|---|---|
| 183-218 | Gradual adjustment 84x UV LEDs from 0 – 100% |



**Channel 2 – Color (Channel 1 must be set 0-17)**

| | |
|---|---|
| 219-254 | Gradual adjustment 84x UV LEDs from 0 – 100% |



**Channel 2 – Color (Channel 1 must be set 0-17)**

| | |
|---|---|
| 255 | Full On |

**Channel 2 – Speed (Channel 1 must be set 18-233)**

| | |
|---|---|
| 0-255 | From slow to fast |

**Channel 2 – Sensitivity (Channel 1 must be set 234-255)**

| | |
|---|---|
| 0-255 | From low to high sensitivity |

**Channel 3 – Strobe (Channel 1 must be set 0-233)**

| | |
|---|---|
| 0-10 | No strobe |
| 11-255 | Strobe effect from slow to fast |

**Channel 3 – No function when channel 1 is set 234-255**

# Maintenance

The LED Light Bar UV requires almost no maintenance. However, you should keep the unit clean. Disconnect the mains power supply, and then wipe the cover with a damp cloth. Do not immerse in liquid.
Keep connections clean. Disconnect electric power, and then wipe the audio connections with a damp cloth. Make sure connections are thoroughly dry before linking equipment or supplying electric power.

### Replacing a Fuse

Power surges, short-circuit or inappropriate electrical power supply may cause a fuse to burn out. If the fuse burns out, the product will not function whatsoever. If this happens, follow the directions below to do so.

**1.** Unplug the unit from electric power source.
**2.** Insert a screwdriver into the slot in the fuse cover. Turn the screwdriver to the left, at the same time Gently push a bit (Turn and Push). The fuse will come out.
**3.** Remove the broken fuse. If brown or unclear, it is burned out.
**4.** Insert the replacement fuse into the holder where the old fuse was. Reinsert the fuse cover. Be sure to use a fuse of the same type and specification. See the product specification label for details.

# Troubleshooting

Showtec LED Light Bar UV
This troubleshooting guide is meant to help solve simple problems.
If a problem occurs, carry out the steps below in sequence until a solution is found. Once the unit operates properly, do not carry out following steps.

**1.** If the device does not operate properly, unplug the device.
**2.** Check the fuse, power from the wall, all cables etc.
**3.** If the LEDs are damaged, return the LED Bar to your Showtec dealer
**4.** If all of the above appears to be O.K., plug the unit in again.
**5.** If you are unable to determine the cause of the problem, do not open the LED Light Bar UV, as this may damage the unit and the warranty will become void.
**6.** Return the device to your Showtec dealer.

## No Response to DMX

Response: Suspect the DMX cable or connectors, a controller malfunction, a light effect DMX card malfunction.

**1.** Check the DMX cable: Unplug the unit; change the DMX cable; then reconnect to electrical power. Try your DMX control again.
**2.** Determine whether the controller or light effect is at fault. Does the controller operate properly with other DMX products ? If not, take the controller in for repair. If so, take the DMX cable and the light effect to a qualified technician.

See next page for more problem solving.

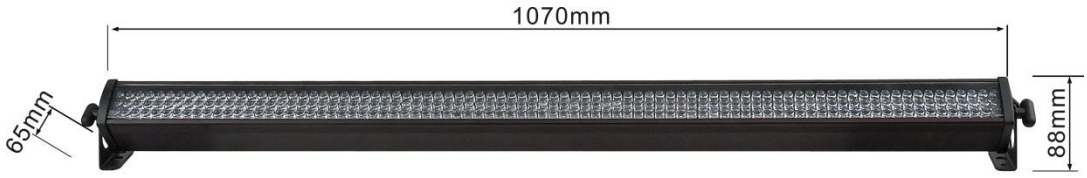
| Problem | Probable cause(s) | Remedy |
|---|---|---|
| One or more fixtures are completely dead. | No power to the fixture | · Check that power is switched on and cables are plugged in. |
| | Primary fuse blown. | · Replace fuse. |
| Fixtures reset correctly, but all respond erratically or not at all to the controller. | The controller is not connected. | · Connect controller. |
| | 3-pin XLR Out of the controller does not match XLR Out of the first fixture on the link (i.e. signal is reversed). | · Install a phase reversing cable between the controller and the first fixture on the link. |
| Fixtures reset correctly, but some respond erratically or not at all to the controller. | Poor data quality | · Check data quality. If much lower than 100 percent, the problem may be a bad data link connection, poor quality or broken cables, missing termination plug, or a defective fixture disturbing the link. |
| | Bad data link connection | · Inspect connections and cables. Correct poor connections. Repair or replace damaged cables. |
| | Data link not terminated with 120 Ohm termination plug. | · Insert termination plug in output jack of the last fixture on the link. |
| | Incorrect addressing of the fixtures. | · Check address setting. |
| | One of the fixtures is defective and disturbs data transmission on the link. | · Bypass one fixture at a time until normal operation is regained: unplug both connectors and connect them directly together.<br>· Have the defective fixture serviced by a qualified technician. |
| | 3-pin XLR Out on the fixtures does not match (pins 2 and 3 reversed). | · Install a phase-reversing cable between the fixtures or swap pin 2 and 3 in the fixture, that behaves erratically. |
| No light | The power supply settings do not match local AC voltage and frequency. | · Disconnect fixture. Check settings and correct if necessary. |
| | LEDs damaged | · Disconnect fixture and return to your dealer. |
| | The power supply settings do not match local AC voltage and frequency. | · Disconnect fixture. Check settings and correct if necessary. |

## Product Specification

Model: Showtec LED Light Bar UV
Voltage : AC 230V-50Hz (CE)
Power consumption: 50W (full output)
Fuse: 250V / 1A
DMX Input : 3-pin XLR Male connector
DMX Output : 3-pin XLR Female connector
252 LEDs
40º beam angle
Dimensions : 1070 x 65 x 88 mm (LxWxH)
Weight : 2,5 kg

Selectable 3, 9, 3 (built-in programs) DMX channel operation

**LUX Values (All LEDs full on)**




Design and product specifications are subject to change without prior notice.

CE

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